

Abstract

The present invention relates to a method and network node for controlling packet flow in a buffer means (13; 14) of a network node of a data network, wherein a nominal capacity is assigned to each data flow, and an additional or free capacity is shifted from a first flow portion to a second flow portion when a new data packet of said second flow portion has been received and said nominal capacity has been exceeded. The nominal capacity may be an upper buffer memory limit used for controlling queuing of data packets in a buffer memory (13) of said buffer means, wherein the memory space of the buffer memory (13) is shared between a plurality of channels allocated to respective packet data connections. Then, the free capacity corresponds to a memory space shifted from a first channel to a second channel, when a new data packet of the second channel has been received and not enough memory space is available for the second channel. Thus, a dynamic buffer-sharing mechanism is provided which reduces the number of packet drops in the buffer memory (13) during congestion and improves network throughput. Alternatively, the nominal capacity may be a nominal flow rate at which data flow traffic is guaranteed in a QoS scheduling algorithm. Then, a residual rate corresponding to the difference between the nominal flow rate and an instantaneous traffic is shifted between flow portions of a buffer means controlled by the scheduling algorithm to maximize total system throughput. [Fig. 1].